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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------|
| 09/706,844 | 11/07/2000 | Richard O. Grant | 1139-201 | 8540 |
| 7590 | 01/29/2004 | | EXAMINER | |
| Lieberman & Brandsdorfer LLC 12221 McDonald Chapel Drive Gaithersburg, MD 20878-2252 | | | PRONE, JASON D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3724 | |
| | | | DATE MAILED: 01/29/2004 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application N . | Applicant(s) |
| | 09/706,844 | GRANT ET AL. |
| | Examiner | Art Unit |
| | Jason Prone | 3724 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,5,6,8-13,15,17 and 19 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,5,6,8-13,15,17 and 19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 01 December 2003, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 5, 6, 8-10, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Inada.

Inada discloses the same invention including an elongate monofilament having a proximal and a distal end (24), a collar secured to the distal end of the monofilament (25), that the collar has a hollow interior section adapted to receive the monofilament

(Fig. 7), that the collar comprises a proximal and distal end (Fig. 7), that the distal end of the collar is flush with the distal end of the monofilament (Fig. 7 {Examiner notes: that to the degree that "flush" is disclosed in the claim, the monofilament and the collar are considered flush in Figure 7}), that the proximal end of the collar is adapted to extend toward the proximal end of the monofilament (Fig. 7), that the proximal end of the collar comprises a flange (25b), that the flange and the collar are a single concentric unit (Fig. 7), that the flange includes an external diameter greater than the external diameter of the collar (Fig. 7), that the flange is adapted to place the monofilament adjacent to an aperture in a trimming apparatus (26), that the distal end of the collar encircles a portion of the monofilament extending from the flange to the distal end of the collar (Fig. 7), that the collar comprises a hollow circular cross-section adapted to extend from the distal end of the monofilament to the flange (Fig. 7), that the collar is crimped to the monofilament (25a), that the crimp forms an indentation into the monofilament forward of the distal end (Fig. 7), that placement and position of the collar and crimp is adapted to reduce stress and strain on the monofilament (Fig. 7), a cutting head (14) having a housing (17) with a first end (Fig. 4) adapted to be mounted to a drive shaft (13) and a second end (Fig. 4) having an elongate annular flange (16) and an aperture in the flange from an interior wall to an exterior wall (26), that a portion of the monofilament extending from the distal end of the collar to the flange rests within the interior wall (Fig. 3), and that the collar is comprised of a metallic material (Column 3 lines 4-9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inada in view of Fogle. Inada discloses the invention but fails to disclose a non-circular uniform cross section from the proximal end to the distal end of the monofilament. Fogle teaches a non-circular uniform cross section from the proximal end to the distal end of the monofilament (Figs. 3-9). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Inada with a monofilament with a non-circular cross section, as taught by Fogle, to provide a greater cutting surface area.

6. Claims 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inada in view of Stephens et al. Inada discloses the invention including that the collar comprises a crimp adapted to secure the collar to the monofilament (25a), that the crimp forms an indentation into the monofilament (Fig. 7), and that placement and position of the collar and crimp is adapted to reduce stress and strain on the monofilament (Fig. 7) but fails to disclose that the collar is within the interior wall. Stephens et al. teaches a collar that is within the interior wall (38). Therefore it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Inada with a collar inside the interior wall, as taught by Stephens et al., to

provide added protection for the collar/monofilament and to prevent possible damage to the collar/monofilament.

7. Claims 1, 3, 5, 6, 8-10, 11-13, 15, and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Inada in view of Stephens et al. or Jacyno et al. Inada discloses the invention (See paragraphs 3 and 6) but to the degree, in Inada, that it can be argued that the distal end of the collar is not flush with the distal end of the monofilament, applicant should note that Stephens et al. (Fig. 7) and Jacyno et al. (Fig. 5) both teach a distal end of the collar that is flush with the distal end of the monofilament. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Inada with a collar that is flush with the monofilament, as taught by Stephens et al. or Jacyno et al., to vary the amount of material employed and the degree of securement of the end of the monofilament.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inada in view of Stephens et al. or Jacyno et al. as applied to claim 1 above, and further in view of Fogle. Inada discloses the invention but fails to disclose a non-circular uniform cross section from the proximal end to the distal end of the monofilament. Fogle teaches a non-circular uniform cross section from the proximal end to the distal end of the monofilament (Figs. 3-9). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Inada in view of Stephens et al. or Jacyno et al. with a monofilament with a non-circular cross section, as taught by Fogle, to provide a greater cutting surface area.

Response to Arguments

9. Applicant's arguments with respect to claims 1-3, 5, 6, 8-13, 15, 17, and 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crawford, Fisher et al., and Poole et al.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

JP
January 22, 2004


Allan N. Shoap
Supervisory Patent Examiner
Group 3700